

Product Data Sheet

Product Name: Arachidonic Acid-d8

Cat. No.: GC46874

Chemical Properties

Cas. No. 69254-37-1

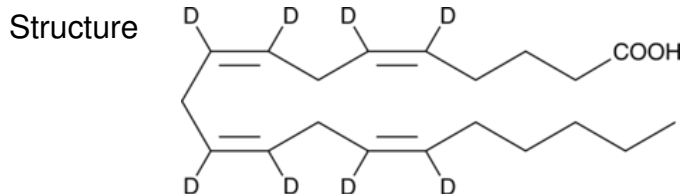
SMILES CCCCC/C([2H])=C([2H])\C/C([2H])=C([2H])\C/C([2H])=C([2H])\C/C([2H])=C([2H])\CCCC(O)=O

Formula C₂₀H₂₄D₈O₂ M.Wt 312.5

Solubility 0.1 M Na₂CO₃: 1.7 mg/ml, DMF: >100 mg/ml, DMSO: >100 mg/ml, Ethanol: Miscible
Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.



Background

Arachidonic acid-d₈ contains eight deuterium atoms at the 5, 6, 8, 9, 11, 12, 14, and 15 positions. It is intended for use as an internal standard for the quantification of arachidonic acid by GC- or LC-mass spectrometry. Arachidonic acid is an essential fatty acid and a precursor for all prostaglandins, thromboxanes, and leukotrienes. Virtually all cellular arachidonic acid is esterified in membrane phospholipids where its presence is tightly regulated through multiple interconnected pathways.¹ Free arachidonic acid is a transient, critical substrate for the biosynthesis of eicosanoid second messengers. Receptor-stimulated release, metabolism, and re-uptake of free arachidonate are all important aspects of cell signaling and inflammation.²

1. Burgoyne, R.D., and Morgan, A. The control of free arachidonic acid levels Trends Biochem.

Caution: Product has not been fully validated for medical applications. For research use only.

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Sci.15(10)365-366(1990) 2.Nixon, A.B., Greene, D.G., and Wykle, R.L.Comparison of acceptor and donor substrates in the CoA-independent transacylase reaction in human neutrophilsBiochim. Biophys. Acta.1300(3)187-196(1996)

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